



CITY OF LEOMINSTER
OFFICE OF THE PURCHASING AGENT
25 WEST STREET
LEOMINSTER, MASSACHUSETTS 01453

www.leominster-ma.gov

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Purchasing Agent

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Addendum #2 – November 10, 2016

**Request for Proposals: Operations and Maintenance for Water and Water
Pollution Control Facilities and Engineering/Construction Services for City's
Water Pollution Control Facility**

R.F.P. Due Date: 2:00 P.M., December 15, 2016

This Addendum is hereby made a part of the RFP document referenced above; it changes and/or supplements the RFP as set forth below. Please be aware of these changes when submitting your RFP submission for the above mentioned project.

Submission Due Date Change

The RFP submission date has been pushed back to Thursday, December 15, 2016 @ 2:00 P.M.

Additions to the RFP

1. Section 1.2.2. Wastewater Facilities Table 3 - Add the following note "2. Castleland and Brooks Ponds have not been accepted by the City; however the City expects to accept in the next 2 years."
2. Item 2.0 Scope of Services Number 7- Change "Major repairs and capital expenditures (i.e., a repair or expenditure that cost more than \$10,000) will be responsibility of the City" to "Major repairs and capital expenditures (i.e., a repair or expenditure that cost more than \$5,000) will be responsibility of the City."
3. Section 2.0 Scope of Services Number 25 – In the Table for the chemical used change "Wastewater" to "Wastewater."
4. Section 2.0 Scope of Services Number 25 Table for chemicals used, add in a new row titled "Polymer - Rotary Drum Thickener (RDT)"
5. Section 2.0 Scope of Services Number 25 – In the Table for chemicals used, add in "15,000 lbs" for the quantity of polymer used in 2015 for the RDT.
6. Section 2.0 Scope of Services Number 25 – In the Table for chemicals used, add in "0 lbs" for the quantity of polymer used in 2013 and 2014 for the RDT.

7. Section 2.0 Scope of Services Number 26B - Change “5,700,000 gallons per day” to “3,800,000 gallons per day.”
8. Section 3.4.1 Fee for Operations and Maintenance Services - Delete the following sentence “The Price Proposal shall also include a price for the design and construction of the water pollution control facility primary settling tanks (see Section 2.0(2)).” The City intends to perform this work after the contract operator is selected, but is not requiring a price for this RFP evaluation.
9. Add to Attachment F the NPDES permit for drinking water, which is attached to and included in this Addendum.
10. Change all references in the RFP to the “Draft Agreement” to “Additional Contractual Terms and Conditions”.
11. In Attachment E Price Proposal – delete Item 2 - Lump sum cost for the construction of the upgrades to the Water Pollution Control Facility including replacing all primary settling tanks and internal components as set forth in the RFP. The City intends to perform this work after the contract operator is selected, but is not requiring a price for this RFP evaluation.
12. Add Attachment G – Additional Contractual Terms and Conditions, which is attached to and included in this Addendum.
13. Delete Attachment K – Water Pollution Control Facility (WPCF) Primary Settling Tank Upgrades.

Questions/Answers to the RFP

1. We request a copy of the DEP approved staffing plan for the water & wastewater treatment facilities.
 - Answer 1 - The staffing plan is listed in Scope of Services section of the RFP in Item #4.
2. Has DEP mandated a separately assigned staff specific to the collection system pump stations, completely independent from the wastewater treatment facility?
 - Answer 2 – No, DEP has not informed the City they need to assign separate staff to the collection system pump stations at this time.
3. Does the current, approved staff by DEP and the City provide for a full time or part time “Lab Technician” to manage the required lab work for both the water and wastewater facilities?
 - Answer 3 - The staffing plan is listed in Scope of Services section of the RFP in Item #4.

4. Is the required certified laboratory analysis for permit testing analyzed in house or is subcontracted with a certified lab?
 - Answer 4 – All lab testing that is to be performed is at the contractor's discretion (in-house or contract laboratory).
5. There are 600 tests required for the storm water discharge for e coli and phosphorus. Are these tests analyzed in house or sub-contracted with a certified lab?
 - Answer 5 – See response to question #4.
6. Does all of the assigned laboratory analytical equipment housed at the facilities belong to the City or Veolia? This would include the treatment facilities and collection system pump stations.
 - Answer 6 - The laboratory analytical equipment is owned by the City.
7. Regarding the Industrial Pretreatment Program (IPP); how many permitted industries are included? W&C requests a sample permit for review.
 - Answer 7 – There are 3 permitted industries include in the IPP. A copy of the sample permit is located at the wastewater treatment facility.
8. W&C requests a copy of the most recent IPP annual report.
 - Answer 8 –A copy of the IPP annual report is located at the wastewater treatment facility.
9. Are assigned office equipment such as computers, printers, etc. owned by the City or Veolia equipment?
 - Answer 9 – Computers and printers other than the SCADA equipment are owned by Veolia.
10. For effective maintenance management of the City's assets, is there computerized maintenance management software (CMMS) and data management software being used?
 - Answer 10 – Yes, maintenance management software is used by Veolia.
11. If so, who owns the software and are the assigned asset databases available for review for this procurement process?
 - Answer 11 – The City owns the asset databases. Veolia owns the software package, which sits on their internal computer system, and is not reviewable at this time. The databases can be transferred over to the new contractor at the time of operations changeover.
12. Are the CMMS asset databases transferable to an incoming contract operator?

- Answer 12 – The transfer and/or creation of the CMMS database is the responsibility of the contractor, and all associated costs of such transfer. The databases are able to be transferred to a new contractor.
13. Is there a process control software management program similar to Hach WIMS and/or CMMS such as Job Cal, available for review? Who owns the software, and are the databases available for transfer to an incoming contract operator?
- Answer 13 – See City's response to question #12.
14. Are vehicles assigned to the project owned by Veolia or the City.
- Answer 14 – A combination of City owned and contractor owned vehicles are currently used. The City only owns the sludge hauling truck.
15. How many vehicles does the city require or currently have assigned to perform the required scope of work?
- Answer 15 - The City owns the tractor trailer that is used by Veolia staff to haul sludge to the receiving facility. All other vehicles required to maintain all systems are the responsibility of the contractor.
16. Does the City currently provide fuel for all assigned vehicles from their municipal garage? If so, how does it invoice Veolia accordingly?
- Answer 16 – The City provides fuel only for the sludge hauling truck, which is fueled at the Leominster Department of Public Works Building fueling depot. Veolia is then invoiced for the fuel.
17. Has an Arc Flash Audit been conducted at all of the assigned assets? If so, is the AF Audit Report available for review?
- Answer 17 – An ARC Flash Study was completed in 2013 and is available to review at the wastewater treatment facility.
18. If an Arc Flash Audit hasn't been conducted, when will the City be initializing this effort to include funding from their appropriate budget?
- Answer 18 – See response to question #17.
19. Is there Arc Flash required safety equipment available or would Veolia take it with them?
- Answer 19 – Veolia does not own Arc Flash Equipment. There is no Arc Flash Equipment currently in use.
20. W&C requests a copy of the current CBA (labor agreement).
- Answer 20 – No CBA agreements exists.

21. W&C asks the City to confirm the actual Raw Water and Finished Water flows and Raw Water and Finished Water quality from the water plants with Compliance and/or City Monthly Operating Reports.
- Answer 21 – Monthly copies of the Raw Water and Finished Water flows are located at the wastewater treatment facility. Proposers can make copies of this information as they wish at the wastewater facility.
22. W&C asks the City to confirm influent and effluent flows for the wastewater facility to include influent flow and loadings and effluent water quality with Compliance and/or City Monthly Operating Reports. Is this data available in excel format?
- Answer 22 – Monthly copies of all of the plant data is available at the wastewater treatment facility. The proposers can make copies of this information as they wish at the wastewater facility.
23. Considering there is a contractual threshold for Power, W&C asks the City to confirm annual power cost for the latest 12-month year as well as the total number of kwh for the plants and pump stations. A monthly breakdown is preferred so seasonal and rain events are captured.
- Answer 23 – A monthly breakdown of the electrical used at the water and wastewater facilities is attached and located at the wastewater treatment facility.
24. W&C asks the City to confirm that the ferric chemical for the primaries at the wastewater plant is ferrous chloride and Actiflo uses ferric chloride.
- Answer 24 – Yes, ferrous chloride is used at the primaries, and ferric chloride is used for the Actiflo.
25. Do the Rotary Drum Thickeners use the same polymer as the Actiflo process?
- Answer 25 – No the RDT use a different polymer. See “Additions to the RFP”, Item #5, in this Addendum for the quantity.
26. The RFP indicates that polymer is used for the Actiflo process but not the thickeners. What are the polymer(s) in use and can the City confirm with the chemical supplier and SDS (MSDS). Fife Chemical wanted the specific brand of polymer including the product numbers and charge.
- Answer 26 – Proposers are directed to check with their chemical supplier/RDT manufacturer as to what polymer(s) are acceptable to use for this process. The City leaves this decision up to the contractor & manufacturer as to what polymer(s) they believe are suitable for this operation. The current supplier/manufacturer of RDT that is currently being used in Leominster is BDP, and the polymer is Praestol K290FLX.

27. W&C requests the product specification of the sand media used in the Actiflo treatment process.
- Answer 27 – Attached is a copy of the Microsand product specification.
28. Please confirm the capacity / volumes in each chemical bulk and day tank specific to the treatment facilities.
- Answer 28 – Attached is a summary of the chemical bulk storage tank.
29. Is it the City's intent for the contract operator to carry an annual line item budget specific to maintenance tools and general supplies?
- Answer 29 – Yes, refer to the RFP for all annual maintenance requirements.
30. W&C asks the City to confirm all annual fuel, (oils or natural gas) costs for the various facilities including the booster stations and wastewater pump stations.
- Answer 30 – Annual fuels (oils or natural gas) cost are all part of the contract operators annual budget as stated in the RFP.
31. W&C requests a current copy of the existing contract operations agreement between the City and Veolia.
- Answer 31 – A copy of this is located at City Hall.
32. W&C requests confirmation on Veolia's current fee to the City for the contract operations agreement. We understand that this may be available in the City budget documentation that's in the "war room".
- Answer 32 – Copies of this are located at the wastewater treatment facility and available for review or copy.
33. We request Attachment G (draft contract) via an addendum as stated in Addendum #1, dated October 6th by the Purchasing Agent.
- Answer 33 – Attachment G is provided in Addendum #2.
34. We request that the City defines "Wastewater Facilities" as it relates to Item #26, p.16 (electrical consumption related).
- Answer 34 -The Wastewater Facilities includes the wastewater treatment plant and all pump stations. It is also included in the monthly electrical cost.
35. We would like to review a CURRENT copy (most recent copy) of the WWTF O&M Manual which would include all of the capital upgrades. The version made available for this RFP process is dated 1983.

- Answer 35 - A copy of the updated plant O&M Manual that includes the Actiflo system, etc., is located at the wastewater treatment facility.
36. We request the specifications for the primary clarifier / settling tanks upgrade as referenced in the RFP (Page 12, 2.0 #2). This was not provided in Attachment K and is required to provide a competitive price pursuant to this RFP.
- Answer 36 –The City intends to replace the primary clarifier upgrade soon after the operations contract is signed, but has decided to remove the cost from this RFP.
37. We request 2 calendar years of HACH Wims (assumed) process and laboratory analysis operating data for the WWTF.
- Answer 37 – All data is available at the wastewater treatment plant.
38. We would like to review the “Basis of Design” report(s) and/or “Process Evaluation Report” for the WWTP; either CDM of Wright Pierce documents.
- Answer 38 – All design reports are located at wastewater treatment plant and Proposers can make copies of this information as they wish at the wastewater facility.
39. We would like to review the WWTF Facilities Plan from 2008 or current.
- Answer 39 – The 2008 WWTF Facilities Plan is located at wastewater treatment facility and is available to be copied by the proposer.
40. We request a copy of the SCADA Communications Network Schematic. This should provide a breakdown / summary of how pump status and operational data is communicated at the WWTF, the 14 assigned sewer pump stations, the 4 surface water facilities, 1 ground water facility, 6 storage facilities, and any other assigned remote stations for this proposed scope of work.
- Answer 40 – All design plans are located at the wastewater treatment facility are available to be reviewed.
41. We request a copy of the latest (2015) Annual Statistical Report (ASR) for the water system.
- Answer 41 – A copy of the 2015 ASR report for the water system is available at the wastewater facility.
42. We request a copy of the Lagoon Discharge Permit(s) assigned to the WTP’s.
- Answer 42 – Copies of the Lagoon Discharge permit are located at the wastewater treatment facility.
43. We request a copy of the City’s assigned Finished Water Pump and Storage Strategy specific to the water consumption demands and pressure zones of the distribution system.

This may include a written program supplemented with distribution maps or a computerized hydraulic water model.

- Answer 43 – A copy of this pressure zone mapping is available at the wastewater treatment facility.

44. W&C wants to confirm what WAS NOT 100% available for review at the WWTF (meeting conference room where we were restricted for this purpose) which contradicts pages 8 & 9, section 1.7 of the RFP;

- All Design criteria, plans and specifications
- All O&M manuals
- All Operating Data, including actual data for the previous 12 months, such as flow data, laboratory test results, and monthly operating reports.
- All copies of current permits.
- A copy of the current City budget for operation of facilities
- All copies of electric bills for facilities for the previous year
- All copies of relevant reports relating to design, construction, and operations and maintenance of the facilities.
- All copies of labor agreements associated with the operation and maintenance of the facilities.

Provision of the above documents will allow W&C to effectively provide a competitive price pursuant to this RFP.

- Answer 44 – All of this information is located at the wastewater treatment facility and Proposers can make copies of this information as they wish at the wastewater facility. There are no labor agreements. Copies of all permits are located at the wastewater treatment facility.

45. We request a copy of the current agreement enforced by Veolia and the City regarding the disposal of water & wastewater residuals, including sludge, screenings and other trash.

- Answer 45 – A copy of the terms and conditions for the sludge hauling contract is attached. Residuals from the water treatment plants are discharged to the sewer collection system.

CITY OF LEOMINSTER

By: Gregory C. Chapdelaine
Purchasing Agent

Leominster Water and Wastewater Electric Usage KWH

Wastewater TP and Pumping Stations										Total Usage				Water TP's				Total KWH			
Month	WWTP	Commercial Rd	Day St	Pioneer PW	Ridgewood Dr	Hamilton St	Wells Ct	KWH		Month		Notown		Fallbrook		Distributing		Total KWH			
July,13	278460	4096	5372	1148	714	906	232			July,13		27360	11300	11300	12900	12900					
Aug	263340	1963	2492	2681	1991	960	229			Aug		26160	14800	14800	14400	14400					
Sept	258160	1797	1694	1842	1165	959	218			Sept		22320	13400	13400	11900	11900					
Oct	227780	1852	1928	1675	1129	910	184			Oct		25680	12900	12900	11700	11700					
Nov	241780	1975	2081	2001	1493	765	143			Nov		23840	11700	11700	15000	15000					
Dec	276920	2223	2552	2455	1913	939	138			Dec		28400	12900	12900	18600	18600					
Jan,2014	288120	2331	3058	2676	2218	1099	196			Jan,2014		25360	21600	21600	19500	19500					
Feb	274960	2514	3406	2699	1840	1125	262			Feb		25040	17300	17300	21100	21100					
March	280140	2061	2696	2088	1884	1238	266			March		25680	18400	18400	18900	18900					
April	231420	3558	4964	2619	2498	1146	221			April		22720	12600	12600	15700	15700					
May	316960	4577	2991	2704	2082	1031	273			May		31600	178900	178900	195700	195700					
June	270900	3117	5477	1757	1190	1125	57			June		307600	157300	157300	190500	190500					
Total KWH	3208940	32064	38711	26345	20117	12203	2419	3340799		Total KWH		680200	4020999	4020999	680200	4020999					
July,14	271460	1963	2422	1292	850	928	158			July,14		27360	11800	11800	12900	12900					
Aug	280980	1644	2230	1380	753	963	187			Aug		28960	13800	13800	13200	13200					
Sept	257880	1598	1746	1241	704	981	161			Sept		26960	12800	12800	10100	10100					
Oct	259420	1962	1913	2344	1149	1149	116			Oct		27440	14900	14900	11000	11000					
Nov	255780	2094	2433	1289	894	533	308			Nov		28400	13000	13000	12200	12200					
Dec	254100	2293	3405	3543	1885	1029	127			Dec		26880	14900	14900	16900	16900					
Jan,2015	287280	3843	4859	1995	2272	1015	93			Jan,2015		25840	13900	13900	19500	19500					
Feb	256900	2387	3638	2325	1699	1341	151			Feb		29920	16300	16300	20600	20600					
March	270480	2237	2503	2329	1884	802	173			March		23680	17800	17800	22100	22100					
April	242200	3388	3640	4877	2994	976	130			April		24240	14100	14100	18300	18300					
May	243320	4528	4858	2886	1805	1081	32			May		28320	12200	12200	18100	18100					
June	309540	2128	2955	1707	1038	1007	59			June		25360	11800	11800	15600	15600					
Total KWH	3189340	30065	36602	27408	17991	11805	1695	3314906		Total KWH		323360	157300	157300	190500	190500		681160		3996066	
July,15	251860	1941	2111	1189	891	919	23			July,15		27840	14800	14800	12200	12200					
Aug	251720	1771	1872	1220	684	886	34			Aug		26640	13300	13300	12200	12200					
Sept	270620	1587	1550	2245	722	881	16			Sept		23920	13800	13800	11500	11500					
Oct	247380	1449	1294	300	713	708	12			Oct		24000	13000	13000	10900	10900					
Nov	240240	2094	1781	2351	1533	751	16			Nov		22160	13200	13200	11200	11200					
Dec	240380	2015	2492	2651	1800	906	23			Dec		25360	16800	16800	14500	14500					
Jan,2016	275520	2054	4546	3879	1989	816	31			Jan,2016		27280	16200	16200	14700	14700					
Feb	225400	2591	3424	1655	1876	934	116			Feb		24960	17200	17200	19500	19500					
March	245980	2647	2792	2883	2047	893	86			March		24720	16200	16200	21100	21100					
April	278040	3044	2787	3223	2226	1179	49			April		23280	15500	15500	18600	18600					
May	212240	2902	5193	2312	1564	758	32			May		25760	11900	11900	15000	15000					
June	251580	1929	2607	1833	1167	918	28			June		30080	13600	13600	14500	14500					
Total KWH	2990960	26024	32449	25741	17212	10549	466	3103401		Total KWH		306000	175500	175500	175300	175300		656800		3760201	



UPPER BLACKSTONE WATER POLLUTION ABATEMENT DISTRICT

Engineer Director / Treasurer Karla H. Sangrey, P.E.

October 20, 2016

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Mr. Roger Brooks
City of Leominster DPW
109 Graham Street
Leominster, MA 01453

DELIVERED VIA EMAIL

Re: July 1, 2016 – June 30, 2017 Sludge Disposal

Dear Mr. Brooks:

The Upper Blackstone Water Pollution Abatement District is willing to serve as the primary disposal site for the Leominster MA WWTP sludges for the period July 1, 2016 through June 30, 2017 with the following provisions:

- Sludge disposal rate will be (as per attached Schedule A) \$319 per dry ton for mixed primary and secondary sludges if the percent solids content is greater than 4.2 percent by weight, or \$70 per thousand gallons if the solids content is less than 4.2 percent.
- A \$10.00 permit fee per month will apply.
- Sludge disposal rates are subject to change.
- All vehicles used to transport sludge must be properly registered with the District.
- A sample of each load of sludge is required. The sample may be taken as the truck is being filled. The sample must be left in the refrigerator at the holding tanks where the driver signs in. Additional sampling may be performed by District personnel.
- The District will accept sludge at our sole discretion.
- The City of Leominster or its assignees can be shut off at any time or reason with little or no advance notice.

Very truly yours;
UPPER BLACKSTONE WATER
POLLUTION ABATEMENT DISTRICT

Karla H. Sangrey, P.E.
Engineer Director / Treasurer

KHS/eam

ec: J. Nowak
M. Johnson
R. Chalifoux

Attachment G

ADDITIONAL CONTRACTUAL TERMS AND CONDITIONS

FINAL AGREEMENT TO BE NEGOTIATED BY THE PARTIES

RECITALS

GENERAL

1. All definitions of words or phrases used in these Additional Terms and Conditions, (together with the exhibits referenced below, the "AGREEMENT") are stated in **Exhibit A**.
2. It is understood that the relationship of CONTRACTOR to CITY is that of independent contractor.
3. All grounds, facilities, equipment, and vehicles now owned by CITY or acquired by CITY shall remain the property of the CITY.
4. This AGREEMENT shall be governed by and interpreted in accordance with the laws of the Commonwealth of Massachusetts without application of any rules concerning conflicts of laws. The exclusive venue for any litigation arising under this Agreement shall be Middlesex Superior Court, Massachusetts, to whose jurisdiction the CITY and CONTRACTOR hereby consent, waiving all objections to venue and forum.
5. This AGREEMENT shall be binding upon the respective successors and assignees of each of the parties hereto. Neither party will assign this AGREEMENT without the prior written consent of the other party. The CITY may withhold such consent in its sole and absolute discretion.
6. All notices shall be in writing and transmitted by certified mail to the address noted in **Exhibit B**.
7. This AGREEMENT, including the Exhibits identified below, which are made a part of the Agreement, sets forth the entire agreement between CITY and CONTRACTOR for the goods and services set forth in the Agreement, and supersedes all previous or contemporaneous representations and agreements (whether written or oral), and may be modified only in writing and signed by the parties in the form of an amendment to this AGREEMENT.

The following exhibits are attached to and made a part of this signed Agreement:

Exhibit A:	Definitions
Exhibit B:	Information for Notices
Exhibit C:	Description of Facilities to be Operated and Maintained
Exhibit D:	NPDES Permits and Water Quality Standards
Exhibit E:	Adjustments to Compensation
Exhibit F:	Breach, Cure and Termination Provisions
Exhibit G:	Insurance Provisions
Exhibit H:	Plans/Specifications for Settling Tanks (separately bound)
Exhibit I:	Section 2.0, Scope of Services, Request for Proposals
Exhibit J:	Contractor's Proposal

SCOPE OF SERVICES

CONTRACTOR SHALL:

1. Perform all services in accordance with the Agreement; all local, state and federal laws, regulations, codes, bylaws, ordinances, orders, permits, including all NPDES permits, and governmental consents and approvals; all equipment manufacturers' warranties; prudent industry practices; any Contractor warranties; reasonable care; and all standards of care and performance prescribed or implied by said laws, regulations, codes, ordinances, orders, permits and governmental consents and approvals.
2. Provide adequate staffing of the FACILITIES with personnel experienced, qualified and, where required, licensed in all relevant areas, including but not limited to technical, laboratory, and administrative/management issues, necessary to satisfy and comply with all legal and regulatory requirements and to provide O&M services in a safe, lawful, responsible, and professional manner, including the safe hauling of wastewater sludge to an approved out-of-town disposal facility. The minimum staffing requirement for the water plants is six (6) full-time, on-site personnel. The requirements for staffing include a Chief Operator for the water plants at the Grade 4 level.

The minimum staffing requirement for the wastewater plant is eight (8) full-time, on-site personnel accordance with the presently established staffing plan in effect at the plant. The requirements for staffing include certification at the Grade 7 level for the Chief Operator and the Assistant Chief Operator.

Contractor understands and agrees that the aforesaid staffing requirements require that the specified number of personnel be on site, and not merely that such number of personnel be on Contractor's payroll.

The contractor is responsible for providing all of the goods and services set forth in this Agreement, including the operation and maintenance by Contractor of the following services/facilities:

- One (1) Water Pollution Control Facility to treat wastewater
 - Fourteen (14) wastewater pumping stations
 - Three (3) water treatment plants for potable water
 - Five (5) water booster stations
 - Industrial Pre-treatment program
3. Provision of all construction services, including construction management, for construction improvements for the Water Pollution Control Facility, including replacement of the internal components of the three primary settling tanks. Design specifications and drawings for improvements to the water pollution control facility have been prepared and are included in Exhibit H attached to this Agreement.
 4. The contractor is responsible for completing all stormwater sampling as included in the new permits for phosphorus and e-coli. The contractor shall include 600 test to sample and test for phosphorus and e-coli
 5. Payment of all wages, salaries and benefits for all personnel employed at the FACILITIES.
 6. Provision for all utilities and consumables such as fuels, chemicals, power, supplies, and lubricants required for normal operation and maintenance, except as otherwise expressly set forth elsewhere in this Agreement.
 7. Preparation of a complete inventory of spare parts, materials, and chemicals on-site at the time of assuming responsibility for operation and maintenance of the facility. The inventory shall be submitted to the City within two weeks after start-up.
 8. Routine and normal repairs and maintenance of plant equipment, buildings, and grounds when such repairs amount to less than \$5,000 per incident, exclusive of O&M CONTRACTOR'S labor. Major repairs and Capital Expenditures (items that cost more than \$5,000) will be the responsibility of the CITY. Minimum routine and normal repairs and maintenance limit shall be \$45,000 for the water plants and \$100,000 for the wastewater plant. Any unspent repair funds - will be reimbursed to the CITY.
 9. Emergency repairs to protect the employees, equipment, buildings, and grounds during Force Majeure events.
 10. Implementation of a proven computerized maintenance management program, suitable for the size and complexity of the CITY'S FACILITIES.
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Attachment G: Additional Terms and Conditions

11. Laboratory sampling, and analyses and reporting, as necessary, for compliance with all current state and federal regulations regarding FACILITIES operations and provide a Quality Assurance/Quality Control program acceptable to regulatory agencies.
12. Provide sampling, inspections, and analyses to carry out the CITY'S existing industrial pretreatment program.
13. Provision of technical, management, administrative and labor relations personnel for backup and support of regular plant employees.
14. Provision of ongoing training programs for plant personnel in operations and maintenance procedures, management, laboratory and process control, Right-to-Know, and related safety issues.
15. Development of a 5-year Capital Improvement Plan and budget identifying major repairs and capital expenditures that will be necessary at the FACILITIES either to restore, maintain, replace or upgrade the FACILITIES or equipment for efficiency, safety, function and/or compliance with current and anticipated regulatory requirements. This program will be updated every year throughout the term of this AGREEMENT.
16. Provision of Public Liability Insurance and General Liability Insurance in the amount equal to or greater than \$10,000,000 naming the CITY as additional insured, and such other insurance as may be required by the City. Upon award of the contract, the selected CONTRACTOR shall furnish insurance certificates reflecting such coverage and, at the request of the City, copies of the insurance policies and all endorsements thereto.
17. Payment of regulatory fines and penalties assessed against the CITY and/or the CONTRACTOR for non-compliance resulting from the negligent action of the CONTRACTOR over the term of the contract, and for all attorneys' fees incurred by the City in connection with the recovery of such payment from CONTRACTOR.
18. Provide written, monthly reports of operations and maintenance, including a summary of all appropriate operating costs and budget status. Information shall include staffing, permit compliance results, corrective and preventative maintenance performed, operational concerns, odor control success, safety and training, Preventive Repairs, Corrective Maintenance and Repairs, equipment replacements, etc. CONTRACTOR shall be available to attend monthly meetings to review monthly status report.
19. Provide and maintain computer-based records of all maintenance and repairs for the FACILITY. CITY shall retain title to and have the right to inspect and copy these records during normal business hours.

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20. Prepare all NPDES permit reports and submit these to the CITY for transmittal to appropriate agencies.
 21. Perform other services that are incidental to and/or inferable from the Scope of Services, as directed by the CITY. Reimbursement, invoicing, and payment for same shall be by separate written agreement.
 22. Cooperate fully with the CITY and provided all assistance in enforcing existing equipment warranties and guarantees and maintaining warranties on any new equipment purchased on behalf of the CITY.
 23. Implement a mutually agreeable septage management and treatment program. CONTRACTOR will be responsible for controlling, monitoring, and checking all septage trucks that utilize the FACILITY. CONTRACTOR shall fully cooperate with the CITY on septage matters, check the quality of incoming septage, insure that the septage receiving area is kept neat and shall provide septage billing Information to the CITY. CONTRACTOR will not be paid any additional compensation for septage receiving work and shall be expected to receive, handle, and treat up to 6,000 gpd of septage Monday through Friday, excluding holidays,
 24. Be responsible for the disposal of trash within the agreed to compensation.
 25. Supply, as a minimum, the following services for the operations and maintenance of the pumping stations:
 - a. Routine and normal pump station equipment maintenance and repair.
 - b. Pump Station maintenance and repairs that are not considered Major Repairs. Grounds maintenance is also included.
 - c. Provide all power, heat, and other utilities necessary to support the operation of the pumping station.
 - d. Daily pump station operational checks of all facilities.
 - e. Emergency response to pump station failures alarmed to indicate problems.
 - f. All other services normally provided to properly operate, maintain, and care for the pumping stations, including a monthly operations report.
 26. Provide and maintain well-documented records of operations, maintenance, laboratory, personnel, training, safety, process control, daily inspections, materials, alarms, and any
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other significant events. Proper documentation of the above must be presented for review upon request during normal business hours.

27. CONTRACTOR shall be responsible for the cost of delivering sludge to an approved out-of-town disposal facility.
28. Provide administration and overall management of the existing industrial pretreatment program (IPP), including responsibility for all enforcement actions.

THE CITY SHALL:

1. Provide all equipment, structures, and facilities under its ownership and presently located at the FACILITIES for CONTRACTOR'S use.
2. Make Capital Expenditures at the treatment FACILITIES except as stated in the Agreement, including the Scope of Services, Article 2. CONTRACTOR will fully cooperate with the CITY to determine the necessity and cost for these Capital Expenditures.
3. Exercise reasonable efforts to provide influent to the FACILITY having the characteristic set forth in Exhibit D.
4. Establish policies and procedures regarding matters pertaining to the types and quantities of septage that can be received at the wastewater FACILITY and to generally administer the program.
5. Exercise reasonable efforts to provide adequate Raw Water to the FACILITY having the characteristics set forth in Exhibit D.
6. Notwithstanding anything to the contrary in this Agreement, the City makes no representations or warranties, express or implied, as to the condition of any of the City's facilities to be operated and maintained or otherwise serviced by Contractor under this Agreement, and Contractor accepts such facilities "as is" and with any and all defects.

COMPENSATION

1. Contractor's compensation under this AGREEMENT shall consist of an Annual Fee. For the first year of this AGREEMENT, CONTRACTORS' annual Fee is \$_____. The Maintenance and Repair Limit for the first year is \$145,000.

Attachment G: Additional Terms and Conditions

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2. CITY will pay CONTRACTOR one-twelfth (1/12) of Annual Fee for the current year, and payment shall be due and payable on the first of the month for each month that services are provided. All other compensation to CONTRACTOR, if any, is payable within 45 days of City's receipt of CONTRACTORS invoice.
 3. Regarding construction improvements for the Water Pollution Control Facility, CITY will make regular progress payments to CONTRACTOR based on work completed.
 4. CONTRACTOR will rebate to the CITY the difference between the annual Maintenance and Repair Fund for the FACILITY and actual documented expenditures for that year. If actual expenditures for this Fund exceed the particular annual Maintenance and Repair Limit, the CITY will reimburse the CONTRACTOR for such expenditures.
 5. Adjustments to the Annual Fees and Maintenance and Repair Fund shall be made in accordance with Exhibit E.

SCOPE CHANGES

The Annual Fee shall be equitably adjusted for any substantial change in the costs of FACILITY operation and maintenance including but not limited to substantial changes in influent flow and loadings, monitoring or reporting requirements, effluent discharge or solids disposal requirements, personnel or staffing requirements imposed by any governmental agency having the jurisdiction to order such a change that directly causes CONTRACTOR'S costs to materially change, provided that CONTRACTOR shall not be eligible for any increases due to any changes in costs caused by CONTRACTOR's breach of this Agreement or the acts or omissions of CONTRACTOR, its employees, agents, and persons for whom any of them are responsible.

TERM TERMINATION

1. The initial term of this AGREEMENT shall be 10 years, commencing on November 1, 2016. The City reserves to itself the right to extend the Agreement for an additional 10 years, in the City's sole discretion.
2. Either party may terminate this AGREEMENT for material breach by the other party in accordance with the provisions for notification, time for correction, and failure to correct as specified in Exhibit F.
3. Notwithstanding anything to the contrary in this Agreement, the continuation of this agreement is specifically subject to annual appropriation and availability of funds (and termination by City in the absence thereof) as provided by Massachusetts General Laws Chapter 30B Section 12(A).

LIABILITY, PERFORMANCE BOND, AND INSURANCE

1. Contractor shall defend, indemnify, and hold harmless the CITY, its employees, officials, departments, boards, committees, consultants, contractors, and agents from liability for bodily injury, including death, and damage to tangible property claimed by third parties to the extent caused in whole or in part, directly or indirectly, by the acts or omissions of Contractor, its employees, officers, contractors, invitees, licensees, representatives, consultants, agents and persons for whom Contractor is responsible.
2. CONTRACTOR shall also indemnify, defend and hold harmless the CITY from fines, charges, and civil penalties, imposed by any governmental body or regulatory agency on CITY during the term of this Agreement for violations of law or regulation or the CITY's NPDES Permits to the extent caused, in whole or in part, directly or indirectly, by the acts or omissions of CONTRACTOR, its employees, officers, contractors, consultants, representatives, agents, licensees, invitees and persons for whom Contractor is responsible.
3. CONTRACTOR shall also indemnify, defend and hold harmless the CITY from fines and civil penalties imposed by any governmental body or regulatory agency on CITY during the term of this Agreement for violations of the CITY'S approved Industrial Pretreatment Program to the extent caused by the acts or omissions of CONTRACTOR or CONTRACTOR'S employees, agents, invitees, licensees or persons for whom Contractor is responsible.
4. Contractor shall provide a performance bond and the insurance coverage as described in Exhibit G.
5. During any construction work performed by Contractor, Contractor shall ensure that Massachusetts prevailing wages are paid for such work, and that the Contractor furnishes a performance bond and payment bond each in the amount of 100 percent of the cost of construction issued by a surety qualified to do business in Massachusetts and satisfactory to the City.
6. The foregoing indemnification provisions are in addition to all other rights and remedies available to the City.

DISPUTES AND FORCE MAJEURE

1. Neither party shall be liable for its failure to perform or for delay in performance of its obligations hereunder (other than payment) when such failure is due, through no fault of such party, to Force Majeure including but not limited to any event beyond its reasonable control including fire, flood, explosion, or other casualty loss, strikes and

labor disputes (other than a legal strike by, or labor dispute of, CONTRACTOR'S employees), accident, epidemic, acts or omissions of government, or wrecks or delays in transportation of supplies, materials, and equipment. The party invoking Force Majeure shall notify the other party in writing as soon as possible upon becoming aware of the event of Force Majeure, and shall exercise all reasonable and diligent efforts to overcome such event. Events caused, in whole or in part, directly or indirectly, by persons for whom Contractor is responsible or over whom Contractor may exercise control, contractual or otherwise, shall not constitute a Force Majeure event.

EQUAL OPPORTUNITY

CONTRACTOR will maintain an equal opportunity/affirmative action program as required by applicable law for employment at the FACILITIES.

WARRANTY

1. In addition to all other warranties provided in this Agreement and implied by law: The CONTRACTOR warrants that it will operate and maintain the FACILITIES in accordance with the provisions of this AGREEMENT, all applicable laws and regulations, applicable equipment manufacturers' warranties, and generally accepted industry principles and practices for maintenance and operation of similar facilities, within the FACILITIES' design-capacity capabilities, so that the drinking water and effluent wastewater conform to federal, state and local water quality/effluent standards, including the standards summarized in Exhibit D. The CONTRACTOR's liability for breach of this warranty shall include reimbursement of fines and civil penalties, including as set forth in Paragraph 3 and 7 of the *Liability and Insurance* section of this AGREEMENT, and City's attorneys' fees.

MISCELLANEOUS

1. The parties intend that there shall not be any third party beneficiaries to this AGREEMENT.
2. If any provision of this AGREEMENT is held invalid or unenforceable, the remainder of the AGREEMENT shall remain in full force and effect. The parties shall negotiate in good faith to substitute for the invalid or unenforceable provision a provision that as near as possible maintains the same or similar allocation of risks and benefits between the parties as the original provision had done.
3. The failure of either party to enforce any right hereunder shall not be construed as a waiver of its right to enforce that or any other right hereunder in the future. Any waiver must, to constitute a waiver, be express and unequivocal.

EXHIBIT A

DEFINITIONS

- A.1 "*The FACILITY(IES)*" means all equipment, vehicles, grounds, sewers, and facilities described in Exhibit C.
- A.2 "*Capital Expenditures*" means expenditures for:
- (1) the purchase of new equipment or facility items that cost more than \$5,000;
 - (2) major repairs which significantly extend equipment or facility service life and cost more than \$5,000; or,
 - (3) expenditures that are planned, non-routine, and budgeted by OWNER.
- A.3 "*Annual Fee*" means a fixed sum for CONTRACTOR'S services. The Annual Fee includes all direct costs, labor, overhead, and profit for CONTRACTOR'S performance of operation and maintenance of the FACILITIES as expressly required hereunder, including the costs of performing all Preventive Maintenance and Corrective Maintenance and Repairs.
- A.4 "*Preventive Maintenance*" means the cost of those routine and/or repetitive activities required by the equipment or facility manufacturer or CONTRACTOR to maximize the service life of the equipment, vehicles, and facility.
- A.5 "*Corrective Maintenance and Repairs*" means those non-routine/non-repetitive activities required for operational continuity, safety, and performance generally due to failure or to avert a failure of the equipment, vehicle, or facility or some component thereof.
- A.6 "*Biologically Toxic Substances*" means any substance or combination of substances contained in the plant influent in sufficiently high concentration so as to interfere with the biological processes necessary for the removal of the organic and chemical constituents of the wastewater required to meet the discharge requirements of the CITY's NPDES permit. Biologically toxic substances include but are not limited to heavy metals, phenols, cyanides, pesticides, and herbicides.
- A.7 "*Adequate Nutrients*" means plant influent nitrogen, phosphorus, and iron contents proportional to BOD₅ in the ration of five parts nitrogen, one part phosphorus, and one-half (0.5) part iron for each 100 parts BOD₅.

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- A.8 "SERVICE COMMENCEMENT DATE" means the date on which the CONTRACTOR begins operation and maintenance of the FACILITY.
- A.9 "PRODUCT WATER" means the treated water released from the water treatment facilities.
- A.10 "RAW WATER" means water entering the water treatment facilities.
- A.11 "COMPLIANCE MONITORING" means the sampling and analysis schedule required by the DEP or EPA as specified in Exhibit D.
- A.12 "FORCE MAJEURE" means any event that occurs through no fault of the party invoking Force Majeure and that is beyond the reasonable control of such party, including but not limited to war, earthquake, fire, flood, explosion or other casualty loss, strikes and labor disputes (other than a legal strike by, or labor dispute of, the party's employees), accident, civil commotion, epidemic, or reasonably unforeseeable acts or omissions of government.

EXHIBIT B

ADDRESSES OF SIGNATORIES

THE CITY:

Mr. Greg Chapdelaine, Purchasing Agent City of Leominster
Leominster City Hall
Room 15
25 West Street
Leominster, Massachusetts 01453

THE CONTRACTOR:

EXHIBIT C

FACILITY DESCRIPTION

The facilities include the City's three (3) water treatment facilities and the wastewater treatment facility.

WATER TREATMENT PLANTS

The City's water system is supplied from the sources shown in Table 1, below.

Table 1 Water Sources

Approximate Source	Capacity (mgd)	Treatment
Fall Brook Treatment Plant	2.0	Clarification, Filtration, Chlorination
Notown Treatment Plant	4.0	Clarification, Filtration, Chlorination
Distributing Reservoir	2.0	Clarification, Filtration, Chlorination
Wachusett Reservoir	5.0	Chlorination (Emergency Only)
Southeast Corner Well Field	1.8	Chlorination

Table 2, below, lists finished water storage facilities in the City's water system.

Table 2 Finished Water Storage Facilities

Approximate Source	Capacity (mg)
Fall Brook Treatment Plant Clearwell ¹	0.2
Fall Brook Storage Tank ¹	1.0
Notown Treatment Plant Clearwell ¹	1.0
Notown Treatment Plant Tank ¹	3.0
Sunrise Avenue Tank	0.75
Legate Hill Tank	1.0

Water Treatment Plants. There are three water filtration plants included within the scope of services of this RFP: The Fall Brook Treatment Plant, the Notown Filter Plant, and the Distributing Reservoir Treatment Plant. The Fall Brook Treatment Plant began producing treated water in August 1988. The Notown Filter Plant, originally constructed in 1935, was upgraded and modified in 1942, 1972, 1999, and in 2013/2014. The Distributing Reservoir Treatment Plant was built in 2010. Additional details are provided below.

- **Fall Brook Treatment Plant.** This facility was designed to treat an average daily flow of 1.3 million gallons (2 million gallons peak) and uses a treatment process that includes

flocculation, clarification, filtration through granular activated carbon (GAC), and chlorination.

Process Description. Water is transported from Fall Brook Reservoir through an 18-inch suction line to three 700 gallon per minute (gpm) single-speed, centrifugal low-lift pumps. The low lift pumps discharge to the two-stage flocculation basin. Chemicals (i.e., alum and sodium aluminate) are added at the first (rapid-mix) basin, and the flow is mixed using a high-speed mixer. The flow then enters the second chamber where slow mixing allows flocculation to occur. The flocculated water flows from the rapid-mix basins to the vacuum towers of the up-flow clarifiers. Vacuum pumps exhaust air from the towers, creating a vacuum which is periodically released. This vacuum release allows flow to drain by gravity from the towers into the clarifiers through the distribution piping at the bottom of the clarifiers. The flow moves upward through the clarifier sludge blanket, where the floc is entrapped and removed from the flow. Excess sludge is periodically discharged to the City's sewer system. The periodic cycling of the vacuum causes the sludge blanket to pulsate, keeping the blanket suspended in the clarifier.

Clarified water is transported by the collection piping in the clarifier to the GAC filters. Water, under gravity flow, is filtered and collected in a 200,000-gallon clearwell, where it is chlorinated.

Finished water is pumped from the clearwell to the 1 million gallon storage tank as needed to maintain storage-tank level. The clearwell pumps cycle on and off in response to the level of the clearwell.

- **Notown Treatment Plant.** The Notown Plant, originally a 2 million gallon per day (mgd) facility, was constructed in 1935. It employed a conventional treatment process that included flocculation, sedimentation, and filtration. In 1942, plant capacity was increased to 4 mgd by the addition of a second sedimentation tank, four additional filters, and a second 0.5 million gallon clearwell. In 1972, a sludge settling lagoon, sludge sand-drying beds, pre- and post-chlorination, and an emergency generator were added to the facility. In 2013, an "Up Flow" clarification process was added to the front end of the plant. In 2015, the filters were upgraded with air backwash and new filter media.

The plant receives flow by gravity from Simond's Pond, one of three reservoirs in the Notown watershed area.

Process Description. Flow to the treatment plant is received from Simond's Pond through a 20-inch intake line. The intake structure is equipped with a bar rack followed by wire mesh screens.

The plant inflow is regulated by a hydraulically operated cone valve that maintains a constant water level in the filters. Flow enters two up flow clarifiers, soda ash and alum

can be added for coagulation, lime for pH adjustment, and powdered activated carbon for taste and odor control. Clarified water is directed to the filters. Lime is added to the filtered water prior to the clearwells for pH control, and chlorine may also be added at this point.

The filters are designed to operate at a constant flow rate. The influent cone valve maintains a constant level of water on the filters. The eight filters have 14 inches of carbon (anthracite) over 10 inches of sand. Under the sand is 18 inches of support gravel. The filters are manually backwashed. All flow from the reservoir, through the plant and to the clearwell and storage tank, is by gravity.

Backwash water is sent to the municipal sewer system.

Lime Slurry is added by gravity at the discharge from the filters, ahead of the clearwell. As the flow discharges from the clearwell, chlorine is added.

- **Distributing Reservoir. Chlorination Station.** The Distributing Reservoir Water Treatment Plant has a design capacity of 2.0 mgd and uses a treatment process that includes clarification and filtration through granular activated carbon (GAC) and chlorination.

Process Description. Water flows through a 20-inch Raw Water main from the Distributing Reservoir to Raw Water pumping chamber. Aluminum Sulfate and Soda Ash are added prior to a static mixer as the water is pumped from the pumping chamber to the upflow clarifiers. The operators have the ability to add polymer as a coagulation aide just prior to the coagulated water entering the upflow clarifiers. After clarification the clarified water is filtered through granular activated carbon (GAC). Filtered water has chlorine added and flows by gravity to a chlorine contact basin/clearwell. Fabric baffles are used in the chlorine contact basin to achieve proper disinfection time. Disinfected water flows by gravity to the distribution system through a 20-inch water main. Prior to distribution soda ash and zinc orthophosphate are added as needed for pH and corrosion control.

The upflow clarifiers are flushed on a regular basis with both air and Raw Water. The clarifier flush water is directed to a clarifier flush waste tank. The residuals from the clarifier flush waste tank are pumped to the public sewer system. The filters are backwashed on a regular basis with both air and treated water. Backwash water is sent to a backwash/recycle tank where residuals are settled. The settled residuals are pumped to the public sewer system. The decant water is recycled back to the Raw Water pumping chamber.

1.2.2 Wastewater Facilities

The scope of services for wastewater operations and maintenance includes the water pollution control facility and pumping stations described below.

Water Pollution Control Facility. The Leominster Water Pollution Control Facility was originally constructed in 1938. The plant was upgraded in 1964, 1984 and 2011. The plant is designed to handle an average daily flow of 9.3 million gallons and to provide advanced secondary treatment, including nitrification and phosphorus removal with a tertiary treatment process

Process Description. Wastewater enters the plant through 36-inch and 42-inch influent lines. Flow entering through the 36-inch line is screened at a mechanically cleaned bar rack and discharged to a wet well from which it is pumped to the influent channel to the aerated grit chamber. The flow from the 42-inch line is discharged to the aerated grit chamber influent line where it is metered by a Parshall Flume upstream of the point where the 36-inch line flow is discharged. A venturi flow meter measures the flow from the 36-inch line. Grit is removed from the combined waste streams in the two aerated grit basins. The wastewater flows from the grit basins to through a mechanical fine screen and then to the influent of the intermediate pumping station.

Three screw pumps lift the flow from the discharge channel of the intermediate pumping station to the two primary settling tanks.

The 115-foot diameter primary settling tanks are used to settle the primary sludge and waste secondary sludges are cosettled. The settled sludges are pumped from the primary settling tanks for processing and disposal.

From the primary settling tanks, the wastewater flows to the secondary treatment system, which includes three aeration basins and three 100-foot diameter secondary settling tanks. During the summer months, the secondary treatment process is operated as a single stage nitrification system.

A tertiary treatment system (Actiflo) was added as part of the 2011 plant upgrade to allow the WPCF to meet their stricter permit limit for phosphorus. The Actiflo system is comprised of a coagulation tank, injection tank, maturation tank followed by a lamella sedimentation basin.

Treated wastewater is discharged from the tertiary treatment system and flows by gravity to the two chlorine contact basins. Following chlorination, the flow is dechlorinated using sodium bisulfite and then discharged to the river.

Two Rotary Drum Thickeners, employing polymer as conditioning agents, are used for thickening the combined sludges up to 6 percent. Currently, thickened sludge is hauled to a neighboring community where it is dewatered.

Wastewater Pumping Stations. The wastewater system includes fourteen (14) pumping stations. The total pumping station capacities are as follows:

Table 3 Wastewater Pumping Stations

Station	Capacity (mgd)
Searstown Pumping Station	8.06
Wells Court	0.288
Hamilton Street	0.346
Day Street	2.304
Crawford Street	0.288
Pioneer Drive	1.73
Ridgewood Drive	1.58
Lancaster Street	0.86
Rumbrook Road	0.52
Anthony Road	0.42
Kennedy Way ⁽¹⁾	0.003
Prospect Street	0.005
Castleland ⁽²⁾	0.025
Brooks Pond ⁽²⁾	0.050

1. Kennedy Way pump station is for a school and operated for 9 months out of a year
2. Castleland and Brooks Ponds have not been excepted by the City, however the City expects to accept in the next 2 years.

EXHIBIT D

NPDES PERMITS AND WATER QUALITY STANDARDS

- D.1 The following constitute the design parameters for the Facility: 9.3 million gallons of flow per day, 10,350 pounds of BOD5 per day, 14,620 pounds of suspended solids, and a daily peaking factor of 1.8 times flow.
- D.1.5 Contractor shall not be responsible for fines or penalties imposed on the City through no fault of Contractor and to the extent due to one or more of the following: (1) the FACILITY influent does not contain Adequate Nutrients to support operation of FACILITY biological processes and/or contains Biologically Toxic Substances which cannot be removed by the existing process and facilities; (2) dischargers into CITY's sewer system violate the CITY's Ordinances; (3) the flow influent BOD5 and/or suspended solids exceeds the FACILITY design parameters set forth above which are; or, (4) if the FACILITY is inoperable or can operate only at a reduced capacity on account of construction or similar activities, or Force Majeure events.
- D.2 In the event any one of the FACILITY influent characteristics, suspended solids, BODS or flow, exceeds the design parameters stated above, CONTRACTOR shall return the plant effluent to the characteristics required by the NPDES permit in accordance with the following schedule after Project influent characteristics return to within design parameters.

Characteristics Exceeding Design Parameters by	Recovery Period (maximum)
10% or less	7 days
Above 10%, less than 20%	14 days
20% or above	20 days

Notwithstanding the above schedule if the failure to meet effluent quality requirements is caused directly by the presence of Biologically Toxic Substances or the lack of Adequate Nutrients in the influent, then Contractor will have a 30-day recovery period after the influent is free from Biologically Toxic substances or contains Adequate Nutrients.

- D.3 CONTRACTOR shall not be responsible for fines or penalties or any other liability if, through no fault of Contractor, influent exceeds design parameters, does not contain Adequate Nutrients, contains Biologically Toxic Substances, or the FACILITY is inoperable.
- D.4 Notwithstanding the foregoing, even where, under the provisions of this Agreement, CONTRACTOR is excused from any noncompliance with the requirements of the City's

NPDES permit, Contractor will nonetheless use all reasonable efforts to meet those requirements.

FACILITY RAW WATER AND PRODUCT WATER QUALITY CHARACTERISTICS

- D.5 PRODUCT WATER QUALITY - in addition to the other standards of performance set forth in the Agreement, the CONTRACTOR will use best efforts to operate the FACILITY as provided in this AGREEMENT to provide Product Water within the quality standards established by the EPA and DEP, the Safe Drinking Water Act consistent with the demonstrated design capability of the FACILITY System pressures will be maintained at levels acceptable to the City and consistent with the capability of the FACILITY. The CONTRACTOR shall not be responsible for fines, penalties or other liabilities relating to violation of any such standards if due directly to one or more of the following:
- (1) The Product Water flow exceeds the FACILITY design parameters.
 - (2) If the FACILITY is inoperable or can operate only at a reduced capacity on account of construction or similar activities or Force Majeure events as described in this AGREEMENT.
- D.6 COMPLIANCE MONITORING - To be completed and incorporated in Exhibit D on the execution date of this AGREEMENT.
- D.7 RAW WATER CHARACTERISTICS - The normal range of inorganic and constituent parameters which vary due to predictable seasonal and rainfall conditions. The Raw Water constituents and normal range of values will be completed and incorporated in Exhibit D on the execution date of this AGREEMENT.
- D.8 Whenever the CONTRACTOR is excused from meeting the requirements of the applicable water quality standards, it will nonetheless use all reasonable efforts to meet those requirements.

EXHIBIT E

ADJUSTMENTS TO COMPENSATION

E.1 INFLATION OR DEFLATION ADJUSTMENT

Compensation shall be increased or decreased as follows:

ANNUALLY

Compensation shall be adjusted annually for inflation adjustments and CPI-related items according to the following U. S. Department of Labor, Bureau of Labor Statistics Index: Consumer Price Index (CPI-W) Boston local area - all items (U. S. City Average, 1982 - 1984 = 100). The first adjustment in compensation shall be effective one (1) year following the SERVICE COMMENCEMENT DATE and shall be based on the percentage change in the index between the SERVICE COMMENCEMENT DATE and one (1) year following the date. Each subsequent adjustment in compensation shall be effective each contract year thereafter and shall be based on the additional change in the index over the immediately preceding twelve (12) month period.

Example Computation:

CPI-W Boston - all items July, 1991 = 144.7

CPI-W Boston - all items July, 1992 = 148.2

% change CPI-W = 2.4%

New monthly contract price = current monthly contract price x 1.02419

Annual Chemical Used

The Chemical Baseline, WWTF Flow Baseline and Water Flow Baseline shall be adjusted on December 1 of each year starting on December 1, 2017. For avoidance of doubt, an example of the equation to determine the savings resulting from a reduction of WWTF chemicals is as follows:

$$\text{Savings} = \left[\left[\frac{\text{Chemical Baseline (lbs/year)}}{\text{Baseline Annual Average Flow (MGD)}} \right] \times \text{Chemical Baseline Price (\$/lb)} \right] - \left[\left[\frac{\text{Chemical Actual (lbs/year)}}{\text{Actual Annual Average Flow (MGD)}} \right] \times \text{Actual Chemical Price (\$/lb)} \right]$$

Annual Electricity Used

Wastewater Facilities. 3,300,000 kilowatt-hours/year ("WWTF Electric Baseline") for all wastewater facilities at a flow of 5,700,000 gallons per day, or "gpd" (the "WWTF Flow Baseline") The cost of electricity in excess of the WWTF Electric Baseline at the WWTF Flow Baseline shall be deducted by the City from the fee otherwise payable to contractor for services

under the contract. On December 1 of each year during the contract term starting with December 1, 2017, the WWTF Electric Baseline and WWTF Flow Baseline shall be adjusted based on the preceding 12 month period.

Water Facilities. 656,800 kilowatt-hours/year (“Water Electric Baseline”) for all water facilities at a flow of 3,800,000 gallons per day, or “gpd” (the “Water Flow Baseline”). The cost of electricity in excess of the Electric Baseline at the Water Flow shall be deducted by the City from the fee otherwise payable to contractor for services under the contract. On December 1 of each year during the contract term starting with December 1, 2017, the Water Electric Baseline and Water Flow Baseline shall be adjusted based on the preceding 12 month period. See sub-clause “c” of this paragraph 26 for the equation.

The equation to determine the amount to be paid by contractor for excess electricity usage as set forth in the preceding subparagraphs for the wastewater facilities and water facilities is as follows:

$$\text{Excess Electricity Cost} = \left[\left[\frac{\text{Electrical Baseline (kwh/year)}}{\text{Baseline Annual Average Flow (MGD)}} \right] \times \text{Electrical Baseline Price (\$/kwh)} \right] - \left[\left[\frac{\text{Electrical Actual (kwh/year)}}{\text{Actual Annual Average Flow (MGD)}} \right] \times \text{Actual Electrical Price (\$/kwh)} \right]$$

EXHIBIT F

BREACH, CURE, AND TERMINATION

Either party may terminate the Agreement in the event of a material breach of the Agreement by the other party, by giving written notice of the breach to the other party, provided that the breach is not corrected within 90 days (or if related to compensation, within 30 days) after receipt of notice. Notwithstanding the foregoing, in the event of any termination, the City shall, at its option, have the right to require continuation of the Agreement for up to 12 months to permit the City to transition operation and maintenance services to another contractor, in which event Contractor shall continue to perform all services in accordance with the provisions of the Agreement, and shall fully cooperate with the City in the transition to a new contractor. Contractor agrees that, notwithstanding any alleged breach of Agreement by the City or any pending disagreements between the parties, including as to the extent or scope of or payment for services performed by Contractor or the time required for such performance, Contractor shall provide all services and cooperation in accordance with the provisions of the Agreement, in good faith, and in a timely manner.

EXHIBIT G

PERFORMANCE BOND, INSURANCE, WAIVER OF RIGHTS AND SUBROGATION

During the performance of the work, the Contractor shall maintain Automobile, Workers' Compensation and Commercial General Liability (including, but not limited to, Bodily Injury, Property Damage and Personal Injury) as follows:

- a. Provide a 100% Performance Bond totaling each year's estimated annual cost for the operations of all FACILITIES. All bonds shall be from companies authorized to do business in Massachusetts and satisfactory to the City. Such bond may be renewed every year provided that a fully compliant bond must be in effect without interruption during the term of the Agreement.
- b. ***Commercial General Liability*** –
Coverage shall have minimum limits of \$10M per Occurrence/\$10M Aggregate per project, combined single limit for bodily injury and property damage liability. The policy shall include Premises and Operations; Independent Contractors; Products and Completed Operations, Contractual Liability, Collapse, Explosion and Underground Hazard coverage. The General Aggregate limit of \$10M shall apply per project or per location. This limit may be achieved by a combination of the underlying and Umbrella coverages, if appropriate.
- c. ***Cyber Liability*** –
Provide financial evidence either through insurance and/or reserve fund up to a minimum of \$10M per Wrongful Act which offers protection to the City in the event of a cyber intrusion allegedly and actually caused by the Contractor's Wrongful Act. Include protection from Wrongful Acts triggering the Contractor's liability in relation to information security and privacy; regulatory defense and penalties; website media content; privacy notification costs; credit monitoring costs; and crisis management. Indicate any coverage conditions associated with encryption of mobile devices or laptops. Detail how coverage will dovetail with General Liability Insurance and Pollution Liability in association with bodily injury and property damage liability claims. A claims-made policy shall remain in force for a period of six years upon completion of work and termination of this contract or succeeding contracts. A claims-made policy's Retroactive Date must be no later than the first day of initial work for the City.
- d. ***Business Automobile*** –
Coverage shall have a minimum limit of \$10M per Occurrence/\$10M Aggregate, combined single limits for bodily injury liability and property damage liability. The limit may be achieved by a combination of the underlying and Umbrella coverages, if appropriate. This policy shall include Owned Vehicles, Hired and Non-Owned Vehicles Liability. The policy shall also include coverage for Cargo Pollutants.

e. **Workers' Compensation –**

Must meet statutory limits in compliance with Massachusetts and Federal Laws. The coverage must include Employer Liability limits of \$1,000,000/\$3,000,000/\$1,000,000. These limits may be achieved by a combination of the underlying and Umbrella coverages and/or by the Massachusetts Employer Liability Statutory Endorsement

f. **Umbrella Liability –**

At limits suggested by the scope and type of the work to be performed. The Umbrella shall be excess of Employers Liability, General Liability and Automobile Liability.

g. **Contractor Pollution Liability –**

Minimum Limit of \$10M per Pollution Condition

h. **Professional Liability --**

Maintain a minimum Limit of \$10M per Wrongful Act as relates to any incidental or direct economic loss associated with design errors or professional advice. A claims-made policy shall remain in force for a period of six years upon completion of design and/or professional consulting work. A claims-made policy's Retroactive Date must be no later than the first day commencing design and/or professional work for the City.

i. **Railroad Protective Liability –**

If there will be any construction within 50 feet of railroad property and such construction may affect a railroad bridge, trestle, tracks, road-beds, tunnel, underpass or crossing, the Contractor must provide evidence of Railroad Protective Liability Insurance.

j. **Subcontractor Insurance -**

Depending on the type and scope of work, the Contractor assumes liability for all work subcontracted by it to fulfill its duties as outlined in this RFP. As such, it shall be the responsibility of the Contractor to require all of its subcontractors to maintain satisfactory insurance coverage limits so that the Contractor's insurance coverage is not adversely affected by negligence of others.

j. **Special Requirements**

A. The Contractor waives all rights against the City for damages caused to Contractor's property. Such waiver shall include a waiver of the right of subrogation from the Contractor's insurer. The Contractor shall require similar waivers from all Subcontractors and Sub-subcontractors. The Contractor waives all rights against the City for loss or damage to any equipment used in connection with the Agreement where such loss is covered by any property insurance. The Contractor shall require similar waivers from all Subcontractors and Sub-subcontractors.

B. Current valid insurance policies or certificates meeting the requirements herein identified shall be maintained by the Treasurer during the duration of the named project. Renewal certificates of insurance shall be sent to the Treasurer at least 30 days prior to any expiration date.

Attachment G: Additional Terms and Conditions

- C. Certificates of Insurance meeting the required insurance provision shall be forwarded to the Treasurer at least 30 days prior to the commencement of the work.
- D. In addition to any other indemnification obligations of Contractor: To the maximum extent permitted by law, Contractor agrees to and shall indemnify or pay on behalf of, defend and hold harmless the CITY and all departments, agents, committee or board members, officers, employees from and against any and all liability (incl. Employer's Liability and Professional Liability) whatsoever arising from the Contractor's operations or the operations of its agents, representatives and sub-contractors including products & completed operations. This agreement to indemnify, defend and hold harmless the City includes all claims, demands, suits, actions, injunction related expenses, costs, expenses, judgments, penalties and attorney's fees which may be imposed upon, incurred by, or asserted against the CITY and by reason of (a) any failure on the part of Contractor to comply with any provision or term required to be performed or complied with by Contractor under this Agreement; or (b) for the death, injury (personal , financial, bodily or consequential), property damage, loss of property, consequential loss due to faulty work or economic loss suffered by any person on account of or based upon the act, misfeasance, malfeasance, nonfeasance, omission (design or other), inherent building material defect, fault, negligence or misconduct of Contractor or any person hired by, contracted by or otherwise working with Contractor, except to the extent such claim is solely the result of the CITY'S gross negligence or willful misconduct.

This indemnity, defense, and hold harmless agreement shall include indemnity against all cost, expenses, judgments, settlements, penalties, and liabilities (including, without limitation, attorney's fees) incurred or in connection with any claims or proceedings brought thereon and the defense thereof with counsel acceptable to the CITY and/or counsel selected by an insurance company which as accepted liability any such claim.



Microsand Specification
For Actiflo[®] potable water applications

The microsand shall be NSF certified.

<input type="checkbox"/>	Effective size:	110 microns
<input type="checkbox"/>	Coefficient of Uniformity:	< 1.6
<input type="checkbox"/>	Manley Bros.	Grade # 80
<input type="checkbox"/>	Silica (SiO ₂) content	≥ 99.0%

Effective size = $D_{10} = \mu. 10\% \text{ passing}$

Minimal size = $D_1 = 2/3 * D_{10} = 73 \text{ microns}$

Maximum size = $D_{90} = 2 * D_{10} = 270 \text{ microns}$

Coefficient of Uniformity = $\mu. 60\% \text{ passing} / \mu. 10\% \text{ passing}$

Supplier:

Manley Bros. of Indiana, Inc
P.O. Box 80
300 South Vermillion Street
Troy Grove, Illinois 61372-7741

Telephone: (800) 237-SAND or (815) 539-7486

Facsimile: (815) 539-7741

SCHEDULE A

SLUDGE HANDLING RATES

EFFECTIVE JULY 1, 2016 to JUNE 30, 2017

- A. Base rate of \$319 per dry ton for mixed primary and secondary sludges, if the sludge solids content is greater than 4.2 percent by weight, or \$70.00 per thousand gallons if the solids content is less than 4.2 percent.

- B. Volume rate of \$267 per dry ton for mixed primary and secondary sludges for material received in excess of 50 dry tons in a single calendar month, if the sludge solids content is greater than 4.2 percent by weight.

- C. Secondary rate of \$350 per dry ton for secondary sludge, if the sludge solids content is greater than 4.2 percent by weight, or \$77.00 per thousand gallons if the solids content is less than 4.2 percent.

A \$10.00 permit fee per source per month will apply.